

Explorer for ArcGIS Offline Capability

Jay Forstner

GIS Coordinator

Rochester Public Utilities





Explorer for ArcGIS



What is it:

A free mobile mapping application created by Esri that allows users to view public and private maps anywhere either online or offline

What you need:

- Download the app to your mobile device (iOS and Android)*
- Windows 10 version just released*
- Level 2 user to create maps for consumption*



Explorer for ArcGIS - Capabilities

Major Points:

- *View web maps on mobile devices anywhere*
 - *Connected: live data served from internal organization servers or from AGOL services*
 - *Disconnected: mobile map packages on device*
- *Search/interact with the data in the map*
- *Related records*
- *Map mark ups that can be shared*
- *Navigation to features (Navigator, Google, etc)*
- *Measure, bookmarks, compass, pins*



Explorer for ArcGIS – Offline Need

The need for disconnected maps

- Loss of cell/WiFi connection
- VPN access issue
- Server issue/failure
- ArcGIS Online service down
- Safety in the event of above scenarios



Explorer for ArcGIS Offline - MMPKs

Mobile Map Packages (.mmpk)

- ArcGIS Pro required to create the packages
- Explorer compatible early 2018
- Package of map data and properties that is consumable within ArcGIS Runtime products
 - Symbology
 - Searches
 - Related Records
 - Definition Queries
 - Vector Tile Package basemaps
 - Rasters now supported
- Share across your organization for easy download



Explorer for ArcGIS Offline – Getting Started

- Setting up the ArcGIS Pro Map
 - Data must be file based vector data (file geodatabase, shapefile) and vector tile packages (coordinate systems must match for vtp's)
 - Set layers up with symbology, labels, drawing reference scales, definition queries, pop-ups
 - Add the related records you want to be a part of package as well
 - Configure locate functionality for features you wish to query in Explorer
- Run the Make Mobile Map Package geoprocessing tool
- Share your mmpk to your organization



Explorer for ArcGIS Offline – Issues

- ArcFM Objects need to be stripped out
- Need for copying out of SQL/Oracle instance to create the package
- No group layer support
- Search results show layers drawn multiple times
- Complex symbology not showing properly in Explorer
- Annotation and dimension layers not supported with the geodatabase



Explorer for ArcGIS Offline – Pros

- Complete map functionality, access in disconnected environment
- Speed, performance
- Continued growth in functionality
- File size relatively small
- Ease of to sharing/downloading/updating
- Automation of creation of mmpks
- Only one named user required to distribute mmpks



Explorer for ArcGIS Offline - Demo

Explorer and Pro





.mmpk – Python Script

```
import arcview  
import arcpy
```

```
outputfile = "C:\Conference\MMPKs\Poles.mmpk"  
arcpy.management.CreateMobileMapPackage(r"C:\Conference\Map.ma  
px",  
                                         outputfile, None, None,  
                                         "DEFAULT","", "Title", "Summary",  
                                         "description",)
```

Bat File script to run in task:

```
"C:\Program Files\ArcGIS\Pro\bin\Python\Scripts\propy.bat"  
C:\Conference\mmpk.py
```



Explorer for ArcGIS Offline – Q/A

Questions



Contact Information

Jay Forstner

jforstner@rpu.org

507-280-1609

